

CLAIMS

We claim:

1. A method for treating beta-amyloid protein formation, deposition or accumulation in a beta-amyloid protein disease in a patient, the method comprising administering to the patient a therapeutically effective amount of a polypeptide having a conformational similarity to a fragment of a laminin protein.

2. The method of claim 1 wherein the conformational similarity is at least 70%.

3. The method of claim 1 wherein the conformational similarity is at least 90%.

4. The method of claim 1 wherein the polypeptide is synthesized to achieve said conformational similarity.

5. The method of claim 1 wherein the beta-amyloid protein disease is Alzheimer's disease or Down's syndrome.

6. The method of claim 1 wherein said fragment is intact laminin.

7. The method of claim 1 wherein the laminin fragment is a laminin A chain.

8. The method of claim 7 wherein the laminin A chain is derived from mammals.

9. The method of claim 8 wherein the fragment comprises a polypeptide as set forth in SEQ ID NO: 5 or a fragment thereof.

10. The method of claim 8 wherein the fragment comprises a polypeptide as set forth in SEQ ID NO: 4 or a fragment thereof.

11. The method of claim 1 wherein the laminin fragment includes a globular domain repeat within the laminin A chain or a fragment thereof.

12. The method of claim 11 wherein the globular repeats include the peptide sequence of SEQ ID NO: 3 or a fragment thereof.

13. The method of claim 11 wherein the globular repeats include the peptide sequence of SEQ ID NO: 2 or a fragment thereof.

5 14. The method of claim 11 wherein the laminin fragment includes the peptide sequence of SEQ ID NO: 1 or a fragment thereof.

15. A method for the treatment of a patient having an identified clinical need to interfere with beta-amyloid protein formation, deposition or accumulation, the method comprising: administering to the patient a therapeutically effective amount of a polypeptide selected from the group consisting of human laminin, mouse laminin, SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO 4:, SEQ ID NO: 5, SEQ ID NO:6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO:10, SEQ ID NO: 11, and fragments thereof.

16. The method of claim 1 wherein the fragment of laminin protein is an amyloid binding fragment of laminin protein.

17. The method of claim 1 wherein the therapeutically effective amount is a dosage between 0.01μg and about 100mg/kg body weight.

18. The method of claim 17 wherein the therapeutically effective amount is a dosage between 10μg and about 50mg/kg body weight.